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10/083,545	02/27/2002	Sumio Okuno	648.41258X00	5576

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ANTONELLI TERRY STOUT AND KRAUS  
SUITE 1800  
1300 NORTH SEVENTEENTH STREET  
ARLINGTON, VA 22209

EXAMINER

JULES, FRANTZ F

ART UNIT PAPER NUMBER

3617

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/083,545

Applicant(s)

OKUNO ET AL.

J

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "A" in Fig. 4 and "B" in Fig. 1 have both been used to designate hollow shape member. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "B" and "40" in Fig. 1 have both been used to designate hollow shape member. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, in claim 9 the recitation of "the hollow shape members composed of the material for forming said both ends and the hollow shape member composed of the material for forming said center portion are formed as one hollow shape member" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

***Specific tion***

4. The disclosure is objected to because of the following informalities:

On page 8, line 20, the phrase "hollowshapememberA" should be changed to --hollow shape member A--.

Appropriate correction is required.

***Claim Objections***

5. Claims 1-15, 17 are objected to because of the following informalities:

In claim 1, line 3, the phrase "the material used" should be replaced by --material used--

. Similar change should be made to claim 1, lines 4-5, claim 2, line 3, line 4, claim 3, lines 4-5, claim 3, line 6, claim 4, line 4, line 5, claim 5, line 3, line 4, claim 6, line 11, line 12, claim 10, line 3, line 4, claim 11, lines 4-5, lines 5-6, claim 12, line 10, line 11.

In claim 17, line 4, the phrase "the material" should be replaced by --material--.

In claim 3, line 3, the word "are" should be inserted between the words sills and disposed.

In claim 3, line 2, the word "are" should be inserted between the words sills and disposed.

In claim 2, line 3, the phrase "characterized in that" should be replaced by --are selected such that--or an equivalent term.

In claim 3, line 4, the phrase "characterize in that" should be replaced by --are selected such that--or an equivalent term.

In claim 4, line 4, the phrase "characterize in that" should be replaced by --are selected such that--or an equivalent term.

Art Unit: 3617

In claim 5, lines 2-3, the phrase "characterize in that" should be replaced by –are selected such that—or an equivalent term.

In claim 8, line 7, the phrase "hollowshapemember" should be rewritten as –hollow shape member--.

In claim 10, line 3, the phrase "characterize in that" should be replaced by –are selected such that—or an equivalent term.

In claim 11, line 4, the phrase "characterize in that" should be replaced by –are selected such that—or an equivalent term.

Appropriate correction is required.

Claims 7-9, 12-15 are objected as being dependent upon objected base claim 6.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the members" in line 2. There is insufficient antecedent basis for this limitation in the claim. Similar lack of antecedent basis term exists in claim 3, line 2.

Claim 2 recites the limitation "said both end areas of the members" in line 2. There is insufficient antecedent basis for this limitation in the claim. Similar lack of antecedent basis term exists in claim 3, line 2.

Art Unit: 3617

In claim 2, lines 3-6, the phrase "characterize in that the material used to form said both end areas of the members is softer than the material used to form the center area thereof" is confusing as it is unclear whether applicant is claiming the same structure as recited above in claim 1. Similar unclear term exists in claim 3, lines 4-6, claim 5, lines 2-5.

Claim 3 recites the limitation "the side sills" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In claim 4, lines 4-6, the phrase "characterize in that the material used to form both ends thereof is softer than the material used to form the center area thereof" is confusing as it is unclear which particular previously recited structure applicant is referring to by the term "both ends thereof", and the center area thereof".

Claim 6 recites the limitation "the car body" in line 6. There is insufficient antecedent basis for this limitation in the claim. Similar lack of antecedent basis term exists in line 8, claim 12, lines 6-7.

In claim 7, line 3-6, the phrase "the hollow shape members composed of the material for forming said both ends are formed as separate parts from the hollow shape members composed of the material for forming said center portion" is confusing as it is unclear what particular structure applicant is referring to as hollow shape members composed of the material for forming said both ends or hollow shape members composed of the material for forming said center portion as this suggests the existence of different types of hollow shape members when no such distinction has been established in claim 6.

Similar problem exists in claim 8, lines 3-5, claim 9, lines 3-5.

Art Unit: 3617

Claim 8 recites the limitation "the two face plates" in line 5. There is insufficient antecedent basis for this limitation in the claim. Similar lack of antecedent basis term exists in claim 8, line 6, claim 14, line 5, line 7.

In claim 8, line 6, the phrase "one hollow shape member" is confusing as it is unclear which particular one of the numerous hollow shape members recited above, applicant is referring to. Similar confusing term exist in claim 14, line 6.

In claim 8, line 7, the phrase "another hollow shape member" is confusing as it is unclear which particular one of the numerous hollow shape members recited above, applicant is referring to. Similar confusing term exists in claim 14, line 7.

Claim 8 recites the limitation "the longitudinal end portion of a connecting member" in lines 9-10. There is insufficient antecedent basis for this limitation in the claim. Similar lack of antecedent basis term exists in claim 14, line 9-10.

Claim 8 recites the limitation "the abutted areas" in line 7. There is insufficient antecedent basis for this limitation in the claim. Similar lack of antecedent basis term exists in claim 14, line 8.

Claim 8 recites the limitation "the end portions of said two face plates" in lines 11. There is insufficient antecedent basis for this limitation in the claim. Similar lack of antecedent basis term exists in claim 14, line 11.

In claim 8, line 9-15, the phrase "according to said one hollow shape member, the longitudinal end portion of a connecting member connecting said two face plates is protruded from the end portions of said two face plates; according to said other hollow shape member, the longitudinal end portions of said two face plates are protruded from

Art Unit: 3617

the end portion of the connecting member connecting said two face plates, and the connecting member of said one hollow shape member disposed between the two face plates of said other hollow shape member" is confusing as it is unclear how the connection between the two hollow shape members are set up specially with the recitation of "according to said other hollow shape member, the longitudinal end portions of said two face plates are protruded from the end portion of the connecting member connecting said two face plates". Thus, it is unclear from the claim as to whether one hollow shape member overlap another hollow shape member. Similar confusing term exists in claim 14, lines 9-18.

Claim 10 recites the limitation "said side sills" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "said one or more sills" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the lower side of said underframe" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the coupler" in line 4. There is insufficient antecedent basis for this limitation in the claim.

In claim 16, line 5, the phrase "a car body" is confusing as it is unclear which particular one of the numerous car bodies recited above, applicant is referring to.

In claim 16, line 6, the phrase "another car body" is confusing as it is unclear which particular one of the numerous car bodies recited above, applicant is referring to.



Art Unit: 3617

In claim 13, line 2-4, the phrase "said second hollow shape members composed of the material for forming said both ends and said second hollow shape member composed of the material for forming said center portion" is confusing as it is unclear what particular structure applicant is referring to as second hollow shape members composed of the material for forming said both ends or second hollow shape member composed of the material for forming said center portion as this suggests the existence of different types of second hollow shape members when no such distinction has been established in claim 12.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-6, 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Pavlick et al (US 4,715,292).

Claims 1-6, 16-17

Pavlick et al teach all the limitations of claims 1-6, 16-17 by showing in figs. 1-8 a railway car comprising an underframe (A), side structure (B) and a roof structure (C), characterized in that in the underframe (A), the material used to form both longitudinal ends (16, 20) of the car body is softer than the material used to form the longitudinal center.

Art Unit: 3617

Members constituting the floor portion as well as side sill members (120, 136, 148) and one or more center sill (64) of the underframe are selected such that the material used to form both end areas of the members, the center sills (136, 148), and the center sill (64) is softer than the material used to form the center areas of both floor members and center sill members as described in column 5, lines 24-52 of the specification and as shown in Fig. 5 which depicts both front end section and rear end section of the rail car being collapsible as well as tubular members (136, 148).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 6-7, 9-13, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlick et al in view of Kawasaki et al (US 6,394,000).

Claims 6-7, 9-13, 15

Pavlick et al disclose a railway car comprising an underframe (A), side structure (B) and a roof structure (C), characterized in that in the underframe (A), the material used to form both longitudinal ends (16, 20) of the car body is softer than the material used to form the longitudinal center.

Members constituting the floor portion as well as side sill members (120, 136, 148) and one or more center sill (64) of the underframe are selected such that the material used to form both end areas of the members, the center sills (136, 148), and the center sill

Art Unit: 3617

(64) is softer than the material used to form the center areas of both floor members and center sill members as shown in Fig. 5 which depicts both front end section and rear end section of the rail car being collapsible as well as tubular members (136, 148). Pavlick et al teach all of the features as listed above but does not disclose a railway car comprising an underframe and a car body made of plural hollow shape members arranged along the circumferential direction of the car body and welded to one another to form the car body. The general concept of providing an underframe and a car body made of plural hollow shape members arranged along the circumferential direction of the car body and welded to one another to form the car body in a railway vehicle is well known in the art as illustrated by Kawasaki et al which disclose in figs 1-16 an underframe (14) and a car body (10) made of plural hollow shape members (30a, 30b, 30c, 11, 13) arranged along the circumferential direction of the car body and welded to one another to form the car body, see abstract section. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pavlick et al to include the use of an underframe and a car body made of plural hollow shape members arranged along the circumferential direction of the car body and welded to one another to form the car body in his advantageous railway car as taught by Kawasaki et al in order to reduce the weight of the car body while minimizing stress in the car body.

***Allowable Subject Matter***

12. Claims 8, and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. None of the references

Art Unit: 3617

of record suggests a plurality of hollow shape members disposed at both ends of a car body, each hollow shape member having a face plate such that the hollow shape members are connected by weld between two face plates, wherein one hollow shape member including a longitudinal center portion which extends beyond the edged and received in between the face plates of the other hollow shape member, whereby a connecting member is used between the hollow shape members in the manner defined in the instant claims 8, and 14.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Myers, Wilkosz, Wheatley et al, Kawamura et al are cited to show related vehicle comprising vehicle body and underframe made of softer material at the end than at the center of the vehicle.

Kashima et al, Bauer, Stevens et al, Felzer et al, Taguchi et al are cited to show related vehicle underframe including center sill made of softer material at the end than at the center of the vehicle.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone

Art Unit: 3617

numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules  
Examiner  
Art Unit 3617

FFJ

February 23, 2003

**FRANTZ F. JULES**  
**PATENT EXAMINER**  
